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REMARKS

A page containing amended Claim 1, headed "Marked-up Version Showing Changes Made", is enclosed.

The Examiner has made two new Obviousness rejections, one based upon a combination of Pawliszyn with a new reference to Murphy, and a second based upon Murphy taken alone.

Looking first at the rejection of Claims 1-3, 5, 10 and 14-19, under 35 U.S.C. 103(a) as being Obvious in view of Murphy alone, it is apparent that the Murphy apparatus includes, a first sample containing vial, a second solvent containing vial and a syringe including a hollow needle.

It appears that according to the Examiner's construction of Murphy, the "sample vial" is equivalent to our claimed "gas-tight enclosure means", and notes that the "sample vial" is not sealed, and further that a "microvolume " of solvent is not disclosed.

It is noted that the Examiner has included the subject matter of Claim 5 in this rejection, but ignores the lack of any teaching or suggestion in Murphy of the "means for shielding the support from the atmosphere", (see below).

Accordingly, the Murphy apparatus is clearly not the same as (anticipated), or "equivalent" to our apparatus as claimed in Claim 1, which is the appropriate test to follow under a 35 U.S.C. 112(6) Obviousness consideration, under which an apparatus claimed in "means plus function" format, must be examined. It is apparent that the missing element, the "gas-tight enclosure means", is essential to our claimed invention, and thus represents a "substantial difference" from Murphy. It is further submitted that the lack of equivalency between the

Murphy's sample vial and our gas-tight enclosure is further evidenced by the fact that all of these devices depend on establishing equilibrium conditions for extraction and the Murphy device cannot do that in a headspace sampling mode. Accordingly, the Murphy device cannot work with this very useful mode of sampling- headspace. Our claimed device can either sample directly or from the head-space.

It will also be apparent to the Examiner that our support, when in the form of a fibre includes the use of multiple, identical fibers which allow many extractions (samples) to be carried out simultaneously. This is a major departure from the intent or typical use of the Murphy device. Therefore, our claimed apparatus cannot be considered as "equivalent".

The Examiner also admits that Murphy does not disclose the "microvolume of solvent". In this respect, we have amended Claim 1 to specifically recite this restriction in the body of the Claim.

Therefore, our claimed apparatus cannot be considered as "equivalent".

It is also emphasized that our Claim 5 feature of "means for shielding the support from the atmosphere" is not taught or suggested by Murphy.

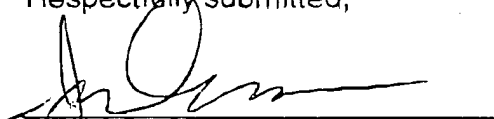
The other Obviousness rejection of Claims 1-5 and 7-19, is based upon a combination of the previously cited Pawliszyn reference, with the Murphy reference.

Pawliszyn differs from our claim 1 invention, in that by the Examiner's own admission, it "fails to teach chemical desorption or desorption into a microvolume".

The Examiner alleges that these deficiencies are met by Murphy.

Murphy discloses both thermal and solvent desorption of extracted analytes. His intent of solvent extraction is to simply assist in removing analytes which may be difficult to desorb thermally (high molecular weight compounds for instance) from the coating inside the needle. On the other hand the use of chemical desorption (solvent) is essential to our invention to achieve advantages such: extract archiving (for short or long term storage before and after analysis), repeated injections from the same extract (improves the precision of the method) and to permit the addition of internal standards (improving the accuracy of the method). If thermal desorption alone is used, any fiber device is unavailable for further extractions until it has been stripped of the analytes (usually in the GC injection port). The Examiner will appreciate that the limited context in Murphy respecting solvent desorption, does not meet the deficiencies of the Pawliszyn references. Accordingly, the combination of the two references is not equivalent to our claimed invention.

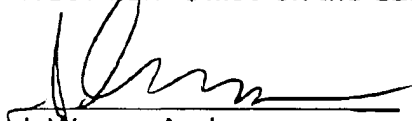
Respectfully submitted,


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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.


J. Wayne Anderson

22 August 2002
August 22, 2002

Marked up version showing changes made

1. (twice amended) An apparatus for carrying out solid phase microextraction of target analytes included in a fluid or a solid sample, comprising gas tight enclosure means for receiving the sample before the enclosure is made gas tight, means located within the enclosure means for extracting the target analytes from the sample, and means located outside of the enclosure means for chemically desorbing the target analytes by solvent extraction by a micro-volume of solvent, wherein the extraction means either samples a head space near the sample or samples the sample directly.